CLAIMS

1. Expansion tank which is intended to be connected to a pipe system which is filled or is to be filled with a liquid, comprising a closed tank with at least one connection opening for a liquid pipe, the tank being provided with a main valve inside the tank, the main valve having a first valve seat and a first closure member which interacts with the first valve seat and being designed to close off the connection opening at a defined difference between the pressure in the interior of the tank and the pressure in the connection opening and/or at a defined liquid level in the tank, the tank being further provided with an additional valve for closing off a channel or passage extending through the first closure member of the main valve from the interior of the tank to the connection opening, which additional valve is closed during normal operation of the expansion tank when connected to a pipe system filled with liquid and is open if the difference between the pressure in the interior of the tank and the pressure the connection opening is higher than the original pressure in the expansion tank when it was delivered ex works.

2. Expansion tank according to claim 1, in which the main valve comprises a first valve seat which is connected to the connection opening and a first closure member, the first closure member being provided, on the side facing the first valve seat, with a sealing ring made from relatively soft material, such as rubber, which can interact with the first valve seat in order to close the main valve, the first closure element being formed by a part of the bottom wall of a cup-like element which is open towards the interior of the tank, the main valve being provided with a spring pressing the first closure member away from the first valve seat, and in which the additional valve comprises a second closure member which is designed to close a central passage in the first closure member at the side of the first closure member opposite the cup-like element and which is pressed towards the first closure member by the spring of the main valve, the spring being dimensioned such that if the difference between the pressure in the interior of the expansion

tank and the pressure in the connection opening is higher than the original pressure in the expansion tank when the tank was delivered the second closure member is pressed away from the first closure member, counter to the spring force of the spring, whereby the additional valve is opened.

3. Expansion tank according to claim 1, in which the main valve comprises a first valve seat which is connected to the connection opening and a first closure member, the first closure member being provided, on the side facing the first valve seat, with a sealing ring made from relatively soft material, such as rubber, which can interact with the first valve seat in order to close the main valve, the first closure element being formed by a part of the bottom wall of a cup-like element which is open towards the interior of the tank, in which a float body is present inside the cup-like element, the float body being freely movable in the cup-like element end being retained therein by means of retaining elements at the free edge of the cup-like element, and in which the additional valve comprises a needle-shaped closure member at the bottom side of the float body which needle-shaped closure member can close a central channel in the first closure member of the main valve at the side of the cup-like element, the arrangement being such that if the float body is in contact with the retaining elements the tip of the needle-shaped closure member is at distance from the central channel.

4. Expansion tank according to claim 1, in which the main valve comprises a first valve seat which is connected to the connection opening and a first closure member, the first closure member being provided, on the side facing the first valve seat, with a sealing ring made from relatively soft material, such as rubber, which can interact with the first valve seat in order to close the main valve, the first closure element being formed by a part of the bottom wall of a cup-like element which is open towards the interior of the tank, in which a float body is present inside the cup-like element, the float body being freely movable in the cup-like element end being retained therein by means of retaining elements at the free edge of the cup-like element, and in which the additional valve comprises a needle-

shaped closure member at the bottom side of the float body which needle-shaped closure member can close a central channel in the first closure member of the main valve at the side of the cup-like element, the arrangement being such that if the float body is in contact with the retaining elements the tip of the needle-shaped closure member is at distance from the central channel, the tank being provided with a second additional valve which is designed as a valve in a channel in the bottom of the cup-like element, the channel extending from the outer side of the cup-like element to central channel in the first closure member, the second additional valve having a valve seat, a closure member and a spring which presses the closure member on the valve seat, the valve seat and the spring acting towards the interior of the expansion tank, the spring being dimensioned such that if the difference between the pressure in the interior of the expansion tank and the pressure in the connection opening is higher than the original pressure in the expansion tank when the tank was delivered the closure member is pressed away from the seat, counter to the spring force of the spring, whereby the additional valve is opened.

5. Expansion tank according to claim 1, in which the main valve comprises a first valve seat which is connected to the connection opening and a first closure member, the first closure member being provided, on the side facing the first valve seat, with a sealing ring made from relatively soft material, such as rubber, which can interact with the first valve seat in order to close the main valve, the first closure element being formed by a part of the bottom wall of a body inside the expansion tank, and in which the additional valve is designed as a valve in a channel in the body, the channel extending from the top side of the body to the region of the first closure member inside the sealing ring, the additional valve having a valve seat, a closure member and a spring which presses the closure member on the valve seat, the valve seat and the spring acting towards the interior of the expansion tank, the spring being dimensioned such that if the difference between the pressure in the interior of the expansion tank and the pressure in the connection opening is higher than the original pressure in the expansion tank when

the tank was delivered the closure member is pressed away from the seat, counter to the spring force of the spring, whereby the additional valve is opened.